REMARKS

In the Office Action, the Examiner noted that claims 1 and 21-39 are pending in the application and that claims 1 and 21-39 are rejected. By this response, claim 1 is amended. In view of the above amendments and the following discussion, Applicants submit that all of the claims now pending in the application are directed to statutory subject matter under the provisions of 35 U.S.C. §101 and are enabled under the provisions of 35 U.S.C. §112, first paragraph. Furthermore, none of the claims now pending in the application are anticipated under the provisions of 35 U.S.C. §102. Thus, Applicants believe that all of these claims are now in condition for allowance.

I. Rejection of Claims Under 35 U.S.C. §101

The Examiner rejected claim 1 as being directed to non-statutory subject matter. In particular, the Examiner stated that the language of claim 1 connotes an abstract idea that does not result in a practical application producing a concrete, useful, and tangible result. (Office Action, p.2). The rejection is respectfully traversed.

Applicants have amended claim 1 to recite a practical application, as suggested by the Examiner. Namely, a Resource Description Language (RDL) description of a target architecture is specified, an intermediate representation is generated from the RDL description, the intermediate representation is traversed to produce a program language file, and the program language file is invoked by a compiler to generate a graph of the target architecture. (See Applicants' specification, p. 7-8). By producing the RDL description, intermediate representation, and program language file, the invention provides a mechanism to specify the target architecture to the compiler in such a manner that the compiler can become independent of the target architecture. In this manner, the compiler can be retargeted to different architectures. (See Applicants' specification, p. 4, lines 7-14). The program language file constitutes concrete, useful, and tangible result in that the file is processed by the compiler to produce a graph of the target architecture, another useful, concrete, and tangible result. Therefore, Applicants contend that claim 1, as amended, fully satisfies the requirements of 35 U.S.C. §101. Accordingly, Applicants respectfully request that the present rejection of claim 1 be withdrawn.

II. Rejection of Claims Under 35 U.S.C. §112

The Examiner rejected claim 1 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner stated that a single step claim is subject to an undue breadth rejection in that the claim covers every conceivable step for achieving a result, while the specification discloses at most only those steps known to the inventor. (Office Action, p. 3). The rejection is respectfully traversed.

As discussed above, Applicants have amended claim 1 to recite more than one step. Thus, the "undue breadth" rejection no longer applies. In addition, the steps of amended claim 1 are described throughout Applicants' specification, for example, pages 7-8 and pages 20-33. Applicants contend that claim 1 as amended contains subject matter described in the specification on at least the aforementioned pages in a manner that enables one skilled in the art to practice the invention. Therefore, claim 1 fully satisfies the requirements of 35 U.S.C. §112, first paragraph. Accordingly, Applicants respectfully request that the present rejection of claim 1 be withdrawn.

III. Rejection of Claims Under 35 U.S.C. §102

The Examiner rejected claims 1 and 21-39 as being anticipated by Hayes et al. (United States patent 5,170,464, issued December 8, 1992). However, in the Office Action, the Examiner refers to paragraph numbers and subject-matter that are not contained in the Hayes patent. Applicants have reviewed the references listed on form PTO-892 and believe that the Examiner is referring to the Bowen reference (United States published patent application 2003/0105620, published June 5, 2003). Notably, the paragraphs and subject-matter cited by the Examiner match that contained in Bowen. Based on this belief, Applicants assume that the Examiner's rejection under 35 U.S.C. §102(b) was intended to be a rejection under 35 U.S.C. §102(e), since the Bowen reference is a published patent application.

Applicants assume the reference to Hayes was a typographical error, being that the substance of the Examiner's rejection refers to Bowen and is not disclosed in Hayes. Hayes generally teaches a system and method suitable for use with a rule-based expert system that maintains a history of execution states through which the

expert system. (See Hayes, Abstract). Hayes does not teach or suggest the steps of obtaining, specifying, generating, traversing, and invoking recited in Applicants' amended claim 1. Applicants address the Bowen reference immediately below.

Bowen generally teaches writing first computer code in a first programming language (e.g., Handel-C), where the first computer code references second computer code in a second programming language (e.g., EDIF, VHDL). The second computer code is simulated for use during the execution of the first computer code in the first programming language. (See Bowen, Abstract; Claims 1-20).

Bowen does not teach each and every element of Applicants' amended claim 1. Namely, Bowen does not teach or suggest: (1) producing a program language file by traversing an intermediate representation of a Resource Description Language (RDL) description specifying at least one resource or functionality of a target architecture; and then (2) invoking the program language file using a high-level synthesis compiler to generate a graph of the target architecture. Rather, Bowen teaches embedding commands of a hardware description language (e.g., VHDL) a program language description (e.g., Handel-C) and simulating the hardware description during execution of the program language description. Bowen does not teach or suggest producing one type of program language description from an intermediate description of the other program language description. Nor does Bowen teach or suggest generating a graph of the target architecture by invoking such a program language description using a high-level synthesis compiler.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). Bowen does not teach: (1) producing a program language file by traversing an intermediate representation of a Resource Description Language (RDL) description specifying at least one resource or functionality of a target architecture; and then (2) invoking the program language file using a high-level synthesis compiler to generate a graph of the target architecture. Thus, Bowen does not teach each and every element of Applicants' amended claim 1 as arranged therein.

Claims 21-39 depend, either directly or indirectly, from claim 1 and recite additional features therefor. Since Bowen does not anticipate Applicants' invention as recited in claim 1, dependent claims 21-39 are also not anticipated and are allowable. Accordingly, Applicants contend that claims 1 and 21-39 are not anticipated by Bowen or Hayes and, as such, fully satisfy the requirements of 35 U.S.C. §102.

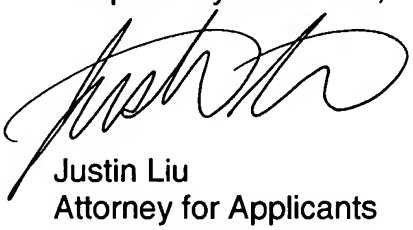
CONCLUSION

Thus, Applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U.S.C. §102, non-statutory under the provisions of 35 U.S.C. §101, or non-enabled under the provisions of 35 U.S.C. §112, first paragraph. Consequently, Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring any adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Justin Liu at (408) 879-4641 so appropriate arrangements can be made for resolving such issues as expeditiously as possible.

All claims should be now be in condition for allowance and a Notice of Allowance is respectfully requested.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on July 6, 2006.

Julie Matthews
Name

Signature